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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Naofumi Kobayashi

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04/26/2004

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 04/26/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/587,352

Applicant(s)

KOBAYASHI, NAOFUMI

Examiner

Derrick W. Ferris

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. **Claims 1-23** as originally filed are still in consideration for this application.
2. Examiner does **not withdraw** the obviousness rejection to *Chauh* in view of *Guerin* for Office action filed 09/22/03. In addressing applicant's arguments in the response filed 03/17/04, applicant argues the following limitation:

*"an encapsulating unit for encapsulating the specified data packet defined as a QoS Guarantee target on the basis of address of QoS Guaranteeing apparatuses existing on the sides opposite to each other in a QoS target area in an IP packet switching network so that a set of the traffic appear as if being one session".*

In reviewing applicant's remarks, it appears that applicant is arguing more than what is recited in the claim(s). As underlined above, applicant argues the difference between the applied prior art and applicant's invention is that the applied prior art fails to disclose or suggest encapsulating the specified data packets defined as a QoS Guarantee target on the basis of address of QoS guaranteeing apparatuses. Examiner respectfully disagrees. In particular, examiner notes that a tunnel using aggregation reads on the underlined limitation above using a reasonable but broad interpretation of the recited claimed subject matter in light of applicant's specification. In particular, see applicant's figure 5 showing a tunnel. As such, both *Chauh* and *Guerin* separately and in combination teach tunnel aggregation using QoS. As pointed out by the applicant (and the *Chauh* reference), however, each of these references teach performing the QoS from a different perspective. In particular, *Chauh* teaches QoS tunnel aggregation from a source gateway perspective and *Guerin* teaches tunnel aggregation from a QoS destination gateway perspective. Specifically, see column 1, line 65 – column 2, line 18 of *Chauh*. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is

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noted that the features upon which applicant relies (i.e., how the reservation is established and taking into consideration intermediate routers between the gateway devices in performing the reservation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In clarifying the rejection, the examiner would like to point out that there are actually two possible interpretations in the examiner's rejection. Both interpretations are applicable. The first interpretation is where the destination gateway performs the reservation (i.e., the TDP as taught by *Chauh* or QoS Guaranteeing apparatus 30 as disclosed by applicant). The second interpretation is where the source gateway performs the reservation (i.e., the TSP as taught by both *Chauh* and *Guerin* or the QoS Guaranteeing apparatus 20 as disclosed by applicant). Here it is important to note that *Chauh* relies on the further teachings of *Guerin* to point out further similarities for both models. Thus the rejection does not necessarily teach away and is proper. In addition, as previously pointed out, applicant does not claim either model such that both models read on the claims (i.e., both interpretations are applicable). With respect to the unclaimed features which applicant argues, only the first model uses intermediate routers when determining the QoS constraints, however, applicant does not claim this feature. In addition, both models teach using the destination address in setting up the tunnel (e.g., the destination port). Thus in summary, the rejection teaches all the limitations argued by the applicant including the further limitations mentioned above that were not recited by the applicant in the claims.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-17, 19, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,519,254 to *Chauh et al.* ("*Chauh*") in view of "Aggregating RSVP-based QoS Requests" to *Guerin et al.* ("*Guerin*").

As to **claim 1**, *Chauh* discloses a modified RSVP-based tunnel protocol for aggregated traffic using a receiver-driven tunnel assignment/admission control procedure [column 2, lines 1-18; column 5, lines 1-23]. In particular, *Chauh* draws a correlation between a first guaranteeing apparatus 20 to TSP 15 and a second guaranteeing apparatus 30 to TDP 25 (see figure 3). *Chauh* also discloses the functionality for a distinguishing unit 202 for classifying target traffics, a resource reservation unit 209 for reserving resources, and a receiving unit 201 for receiving the encapsulated traffic (see steps in figure 5 for the general functionality).

What may not be clear from the *Chauh* reference is an encapsulating unit 204 and de-capsulation unit 207 as disclosed by applicant that aggregates the traffic such that "a set of the traffics appear as if being one session" and as supported at least by applicant's specification on page 15, lines 7-11. Examiner notes that given a reasonable but broad interpretation of the recited claimed subject matter that the limitation is taught by *Chauh*, e.g., see column 6, lines 1-14 and claim 1. It is important to note that the examiner in this

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case has supplied the *Guerin* reference essentially as a supplementary reference since *Chauh* relies on the *Guerin* reference when teaching how tunnels are established. However, assuming, arguendo, that the limitation is not taught by *Chauh* then examiner notes the following obviousness rejection as well. Thus examiner also proposes a slightly different interpretation of *Chauh* where the forward reservation is used instead as primarily taught by *Guerin* (e.g., see column 1, lines 35-47 of *Chauh*).

Examiner notes it would have been obvious to someone skilled in the art prior to applicant's invention to provide functional units to aggregate the traffic so that a set of the traffics appear as if being one session. As support and motivation, *Chauh* attempts to cure the deficiency by disclosing the functionality for both logical units in general terms for aggregating the traffic (see at least column 3, lines 23-57). In addition, as further support and motivation (and for which *Chauh* also relies on), *Guerin* discloses aggregating RSVP-based QoS requests which also discloses encapsulation (and decapsulation) as mentioned at least in section 3.1 (page 5) thus also creating a motivation for an encapsulation and de-capsulation unit so that "a set of traffics appears as if being one session". In addition see, column 4, lines 39-67 of *Chauh*. One skilled in the art would be motivated to perform aggregation in order to preserve QoS for a connection.

As to **claims 2-3**, see the rejection for claim 1.

As to **claim 4**, both references use the RSVP protocol (e.g., see *Chauh* column 3, lines 23-24).

As to **claims 5 and 6**, see figure 3 of *Chauh*.

As to **claims 7-17**, *Chauh* discloses distinguishing traffic based on IP and UDP port numbers (see column 3, lines 22-54). Examiner notes that it would have been obvious to someone skilled in the art to also use other identifiers as well such as destination and source addresses (i.e., pairs of addresses). As support and motivation, *Guerin* discloses such techniques (see Section 3 from pages 5-7).

As to **claim 19**, see column 5, lines 42-60 of *Chauh*.

As to **claims 22-23**, see figure 3 of *Chauh*. Examiner notes a reasonable but broad interpretation of “functions” (see column 3, lines 24-65; column 4, lines 1-38).

5. **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,519,254 to *Chauh et al.* (“*Chauh*”) in view of “Aggregating RSVP-based QoS Requests” to *Guerin et al.* (“*Guerin*”) and in further view of U.S. Patent No. 6,091,709 to *Harrison et al.* (“*Harrison*”).

As to **claim 18**, both *Chauhi* and *Guerin* are silent or deficient to transmitting dummy packets in order to maintain a level of QoS. However, the examiner notes that it would have been obvious to someone skilled in the art prior to applicant’s invention to use dummy packets in order to preserve QoS. As support and motivation, *Harrison* discloses using dummy packets in order to preserve QoS such as for RSVP (e.g., see column 4, lines 56-67). Thus *Harrison* cures the deficiency by using dummy packet in order to maintain a level of QoS as is known in the art.

6. **Claims 20-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,519,254 to *Chauh et al.* (“*Chauh*”) in view of “Aggregating RSVP-based QoS Requests”

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to *Guerin et al.* (“*Guerin*”) and in further view of “Stage Refresh Timers for RSVP” to *Pan et al.* (“*Pan*”).

As to **claims 20-21**, both *Chauhi* and *Guerin* are silent or deficient to using refresh timers. However, the examiner notes that it would have been obvious to someone skilled in the art prior to applicant’s invention to use refresh timers. As support and motivation, *Pan* cures the deficiency by disclosing refresh timers for RSVP (e.g., see Abstract). Examiner also notes a broad but reasonable interpretation of “schedule timer”.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.




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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

  
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